California’s **Green Chemistry:**
The Regulations are Coming!

April 28, 2010 Webinar

*Presented by* Karen Nardi, Trent Norris, and Blake Biles of Arnold & Porter LLP  
*with* Eric Newman and Jeff Sickenger of KP Public Affairs
Overview: What is Green Chemistry?

“Green chemistry is the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. Green chemistry applies across the life cycle, including the design, manufacture, and use of a chemical product. Green chemistry is a highly effective approach to pollution prevention because it applies innovative scientific solutions to real-world environmental situations.”

–California Department of Toxic Substances Control
Overview: Why Green Chemistry in California?

- Many years of proposed chemical bans were based largely on politics and perceived risk rather than science.

- The Governor signed only one chemical ban bill from 2007 to 2009 (AB 1108, banning phthalates in children’s products).

“I do not believe that addressing this type of concern in the Legislature on a chemical by chemical, product by product basis is the best or most effective way to make chemical policy in California.”

--Governor Arnold Schwarzenegger, Signing Message, AB 1108
Overview: Diverse Perspectives in California

- **Legislature's View:** Not equipped to decide complex scientific issues.

- **Environmentalists’ View:** State should have greater authority to regulate chemicals in consumer products.

- **Industry View:** Need a better process that values science, and promotes a level playing field between existing products and alternatives.
Overview: Diverse Worldviews

Precautionary Principle

The precautionary principle applies where "scientific evidence is insufficient, inconclusive or uncertain" and "preliminary scientific evaluation [indicates] that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the chosen level of protection."

—Communication of the European Communities on the Precautionary Principle (Brussels, Feb. 2, 2000)
Overview: Why Was It Enacted?

- **Goal**: Safer alternatives for chemicals in products to protect human health and the environment.

- **Keeping California at the Forefront of Emerging Laws:**
  - **United States**: House and Senate bills to reform the federal Toxic Substances Control Act (TSCA) (1976)
  - **California**: “Green Chemistry” Laws: AB 1879 and SB 509 (2008)

- "With these two bills, we will stop looking at toxics as an inevitable by-product of industrial production. Instead they will be something that can be removed from every product in the design stage—protecting people's health and our environment."
  - Governor Arnold Schwarzenegger, Signing Message, AB 1897 and SB 509
Overview: Who Will Regulate?

- Two Cal/EPA departments are in charge
  - DTSC will play the primary regulatory role
  - OEHHA will play a supporting scientific role
- The new Green Ribbon Science Panel plays an advisory role
- Environmental Policy Council (Cal/EPA secretary and department heads) plays a supervisory role
Overview: Who Are the Stakeholders?

California Green Chemistry

Product Manufacturers
Product Distributors
Product Retailers
Chemical Suppliers
Consumers
Overview: Who Is Likely to Be Regulated?

Alternatives Assessment

Product Manufacturers

Product Distributors

Product Retailers

Certificates of Compliance

Chemical Suppliers

California Green Chemistry

Consumers
Overview: What Do the Bills Require

Green Ribbon Science Panel
- Advise on development and implementation of regulations

DTSC
- Create web-based Toxics Information Clearinghouse
- Establish (via regs) process to identify and prioritize chemicals of concern (COCs) in consumer products
- Establish (via regs) process to evaluate COCs in consumer products, and their potential alternatives, using life-cycle criteria
- Prepare multimedia life-cycle evaluation of proposed regulations
- Select regulatory response

OEHHA
- Screen Data for Toxics Information Clearinghouse

Cal/EPA Policy Council
- Review proposed regulations and multimedia life cycle evaluations
Overview: When Will Regulations Take Effect?

We are here

2009: Wiki and Straw Proposals

Feb 2010: Conceptual Flowchart

April 15, 2010: Outline of regulations

May/June 2010: Draft regulations and public workshop

June/July 2010: Two workshops on alternatives analysis

June/July 2010: Proposed Regulations formally submitted for 45-day public comment period

July-Sept 2010: Environmental Policy Council 90-day review

Fall 2010: External Peer Review (Cal. Health & Safety Code § 57004) and APA requirements

Jan 1, 2011: Deadline for final regulations
DTSC’s Flowchart

Regulations for Safer Products
AB 1879 (FEUER) / SB 509 (SIMITIAN)
CONCEPTUAL FLOW CHART

http://www.dtsc.ca.gov/PollutionPrevention/GreenChemistryInitiative/upload/qc_flowchart-final.pdf
Prioritization

Chemicals of Concern Prioritization Process

Alternatives Assessment

Regulatory Response
Prioritization

Chemicals of Concern Prioritization Process
- Not Regulated by Others?
- Substantial Volume?
- Potential Exposure?
- Effect on Sensitive Sub-Populations?
- Toxicity?
- Adverse Impact on the Environment?

Alternative Assessment

Regulatory Response
Prioritization

Universe of Chemicals

Hazard Tests (3-99)

Chemicals of Concern Prioritization Process

- Not Regulated by Others?
- Substantial Volume?
- Potential Exposure?
- Effect on Sensitive Sub-Populations?
- Toxicity?
- Adverse Impact on the Environment?

Potential Chemicals of Concern

Consumer Product Prioritization Process

- Exposure?
- Not Regulated by Others?
- Dispersive Volume?
- Consumer Use?
- Adverse Impact on the Environment?

Alternatives Assessment

Universe of Consumer Products

Regulatory Response

Potentially Concerning Chemicals with Public Exposure
Prioritization

Universe of Chemicals

- Hazard Tests (3-99)
- Petitions (from public and governmental agencies)

Chemicals of Concern Prioritization Process

- Not Regulated by Others?
- Substantial Volume?
- Potential Exposure?
- Effect on Sensitive Sub-Populations?
- Toxicity?
- Adverse Impact on the Environment?

Potential Chemicals of Concern

- Not Regulated by Others?
- Substantial Volume?
- Potential Exposure?
- Effect on Sensitive Sub-Populations?

Chemicals with Some Information

Alternatives Assessment

List of Prioritized Consumer Products

- Not Regulated by Others?
- Substantial Volume?
- Consumer Use?
- Adverse Impact on the Environment?

Products with Some Information

List of Prioritized Consumer Products with Chemicals of Concern

- Posted on DTSC Website

List of Work Plans Received

- Posted on DTSC Website (Manufacturer, product, completion date, etc.)

Manufacturers

- Submit Alternatives Assessment Work Plans (Demonstrating compliance with AB 1679 criteria)

Examples of Alternatives Assessment Outcomes

- No Alternatives Identified
- Product Reformulation
- Redesign of Product and/or Manufacturing Process
- Other

Regulatory Response

Product Plan of Public Concern

Manufacturers

- Conduct Product-specific Alternatives Assessments (Could be conducted in-house or by a third party)
DTSC’s Flowchart: The Bigger Picture

Green Ribbon Science Panel

Toxics Information Clearinghouse:
- chemical hazard traits
- environmental and toxicological end-points

Multimedia Life Cycle Evaluation of Proposed Regulations

Procedures to protect “trade secrets”
Compliance and Enforcement

- Monetary penalties can be levied
  - **Manufacturers** may pay a fine for:
    - Failure to **submit** or **modify** Alternatives Assessment
    - Failure to submit **adequate** Alternatives Assessment
    - Failure to implement selected alternative by **deadline**
    - Failure to comply with DTSC **regulatory response** for product category

- Products can be banned and even recalled
Compliance and Enforcement

- Monetary penalties can be levied
  - **Distributors/Retailers** may pay a fine for:
    - Sale of regulated product without “certificate of compliance” for products made or imported into California after certain date
      - Products must carry date of manufacture
      - Sellers not liable for accuracy of certificate
        » If they have no reason to question validity
Possible Regulatory Responses

- No action
- Require additional information
- Require labeling
- Require end of life management
- Restrict usage
- Require exposure to be limited
- Prohibit usage (ban)
- Research/development challenge
- Other

The Usual Way: Prosecutorial/Regulatory Discretion

The California Way: Private Enforcement
Cal. Bus. & Prof. Code 17200 et seq.
Regulatory Responses: Precursors

- Require Information
  - EPCRA, CA Safe Cosmetics Act
- Labeling
  - CA Prop 65
- End of life management
  - Electronics recycling
- Restrict usage
  - VOCs, lead paint, lead wheel weights
- Limit exposure
  - Prop 65
- Prohibit usage
  - CFCs, PCBs, asbestos
- R&D challenge
  - Fuel economy standards
Can They Do This?

- State primacy in Health & Safety Matters
- Federal Supremacy Clause/Preemption
  - Express preemption
  - Implied preemption
    - Field preemption
    - Conflict preemption
- Interstate Commerce Clause
  - Non-discrimination against out-of-state businesses
  - Disproportionate burden
- Equal Protection
- First Amendment

Probably Yes
Prop 65 on Steroids

- Both laws driven by lists of chemicals
  - Prop 65 only carcinogens and reproductive toxins
  - Green Chemistry has other endpoints (e.g., endocrine disruptors)
- Both laws affect consumer products nationally
  - Green Chemistry may not apply to all consumer products
  - Foods, pharmaceuticals are exempt from Green Chemistry
- Prop 65 has one regulatory response: “just” warnings
  - Green Chemistry has an entire toolbox
- Prop 65 is primarily enforced by private plaintiffs
  - Green Chemistry likely to have more active government agencies
- Green Chemistry can be amended
Reforming Federal TSCA

- What is TSCA (currently)?
- Two bills
  - SB 3209: “Safe Chemicals Act of 2010”
    - introduced 4/15/2010 by Sen. Lautenberg
    - to be introduced by Reps Rush & Waxman
  - Very similar bills

- They overlap with, but expand well beyond, California’s Green Chemistry requirements
Reforming Federal TSCA

- Pre-manufacture approval (vs. current notice) of new chemical substances and mixtures on a company-by-company, and (new) use-by-use basis.

- Manufacturers or processors of chemical substances or mixtures must submit to US EPA:
  - All risk-related information (e.g., tox data, uses/volumes/other exposure-related information) known to or reasonably ascertainable for all chemicals, AND
  - A minimum data set of toxicity and exposure information for that company’s new chemicals and existing “priority-list chemicals” (as identified by EPA).
Reforming Federal TSCA

- EPA to establish mandatory safety standard “that provides a reasonable certainty of no harm” for the commercial production/distribution/use of all new chemicals (per company) and (at a minimum) all EPA priority-list chemicals.

- Broad EPA authority to order companies to limit/cease commercial activities for failure to comply with new testing, notification, and production/distribution/use requirements.

- No express statutory preemption of state requirements.

- Expanded categories of information/data that will not be entitled to trade-secret and CBI protection.
Reforming Federal TSCA

- How will TSCA reform affect California Green Chemistry?
- How will California Green Chemistry affect TSCA reform?
Concluding Thoughts

- Green Chemistry is a bold regulatory initiative.
- Implementation will likely be by trial and error.
- Product manufacturers (in an outside California) have primary responsibility
  - Many may reformulate to avoid complex “Alternatives Assessment” process
  - Will alternatives be safer?
- Product distributors, retailers and competitors may become “de facto” enforcers.
  - Certificate of Compliance required to sell
- How will the program be funded given California’s budget crisis?
Questions & Answers